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TWO NEW *CERATOCAPSUS* REUTER 1876, FROM THE EASTERN UNITED STATES (HEMIPTERA: MIRIDAE)[1]

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Abstract.—Two new species of *Ceratocapsus* are described: *Ceratocapsus spinosus* from Pennsylvania and *C. aurantiacus* from Florida. The adult of *C. spinosus* and the male genitalia of both species are illustrated.

While examining light trap material from the Frost Entomological Museum, Pennsylvania State University, I discovered two new species of *Ceratocapsus* from the United States. One species, taken at the Archbold Biological Station in Florida is the first truly orange-red *Ceratocapsus* and the other species, taken in western Pennsylvania is the largest member of this genus. They are described and illustrated here.

Ceratocapsus spinosus Henry, new species
Figs. 1–5

Male.—Length 5.83 mm, width 2.0 mm; impunctate, generally fuscous to black, clothed with fine, short setae, intermixed with erect, pilose setae. Head: Length 0.82 mm, width 0.96 mm, vertex 0.34 mm, dorsal width of eye 0.30 mm; black, shiny, finely granulate, not punctate, median line shallowly grooved, basal carina distinct. Rostrum: Length 1.80 mm, brown, reaching middle of mesocoxae. Antennae: I, length 0.62 mm, light brown, with several erect, stout setae; II, length 2.04 mm, weakly thickened to apex, brown to dark brown, especially on apical ½, clothed with fine, recumbent, brown to black setae, fewer at base; III, length, 0.92 mm, dark brown; IV, length, 0.80 mm, dark brown. Pronotum: Length 1.00 mm, width at base 1.60 mm, finely granulate, shiny, black becoming lighter or more brown at base, void of pubescence; mesoscutum black; scutellum black, apex brown, transversely rugose, sparsely set with brown, pilose setae. Hemelytra: Brown, somewhat alutaceous, clothed with short, recumbent, pale setae intermixed throughout (except on embolium and cuneus) with brown, pilose setae; cuneus fuscous to black; corium appearing darker due to fuscous abdomen beneath. Membrane: Translucent, more fumate on apical ½, veins colored as membrane. Venter: Shiny fuscous to black, ostiolar peritreme pale, abdomen clothed with recumbent, pale setae, those setae on genital segment longer. Legs: Uniformly brown, hind tibiae somewhat darker; setae and tibial spines colored like segments. Genitalia: Left paramere three pronged (Figs. 2, 3); basal prong at right angle to middle prong, with 2 distinct subapical spines; dorsal margin

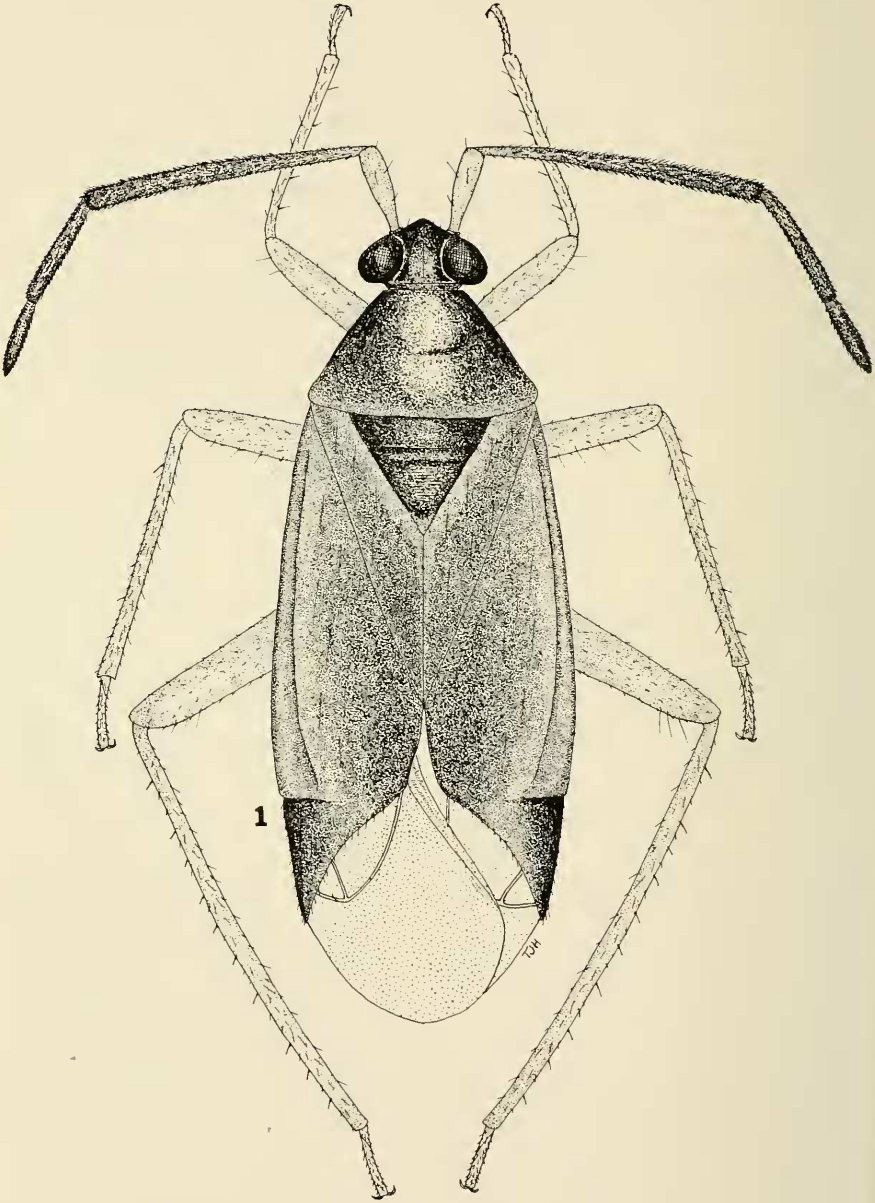


Fig. 1. *Ceratocapsus spinosus*, habitus.

of middle prong with 1 spine; right paramere simple, relatively straight (Fig. 4) basal process simple and blunt; theca (Fig. 5).

Female.—Unknown.

Holotype.—♂, Pennsylvania: Beaver Co., Pa., Rt. 168, 6 mi SW of Darlington, 4 August 1975, Mrs. M. A. Carter collector (USNM type #74022). Paratype: ♂, 1 August 1975, same data as holotype (PSU collection).

Remarks.—*Ceratocapsus spinosus* keys to *nigrocephalus* Knight in Knight (1923, 1941), but differs from it by the larger size, the uniformly black cuneus, the brown corium, the relative lengths of the antennal segments and the structure of the male genitalia.

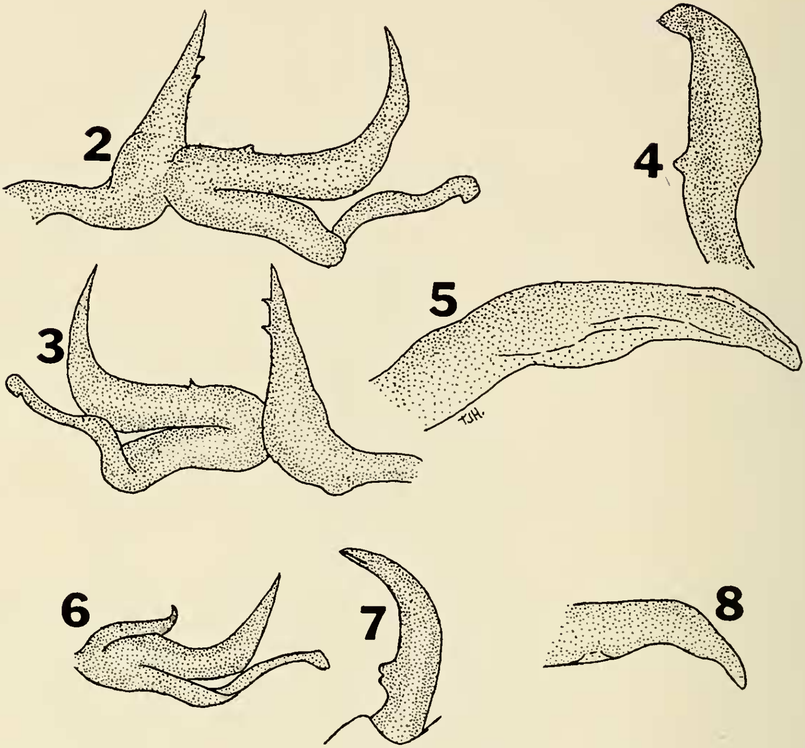
This species may be separated from all other *Ceratocapsus* by the large size, the black head, pronotum, scutellum and cuneus, the brown hemelytra clothed with pilose setae and the male genitalia. The basal prong of the left paramere bears two subapical barbs or spines which easily characterize this species and are the basis for the name *spinosus.*

Ceratocapsus aurantiacus Henry, new species

Figs. 6–8

Male.—Length 3.36 mm, width 1.48 mm, impunctate, general color orange to orange red, clothed with pale to silvery, sericeous pubescence, intermixed with more erect, pale setae. Head: Length 0.68 mm, width 0.78 mm, vertex 0.30 mm, orange, sparsely set with erect, pale setae; eyes reddish. Rostrum: Length about 1.30 mm (imbedded in glue), reaching posterior margin of metacoxae. Antennae: I, length 0.38 mm, pale testaceous; II, length 1.06 mm, pale testaceous, apex lightly tinged with orange; III, length 0.64 mm, testaceous, tinged with orange; IV, length 0.52 mm, pale orange or reddish. Pronotum: Length 0.70 mm, width at base 1.20 mm, shiny orange to reddish orange, sparsely set with erect and semierect, simple setae; mesoscutum orange; scutellum orange, more reddish just before apex, apex pale orange, weakly but distinctly rugose. Hemelytra: Generally orange to orange red; outer margin of corium, area just before cuneal fracture and cuneus distinctly orange red; sparsely set with semierect, pale setae, clavus and corium clothed with silvery, sericeous pubescence. Membrane: Fumate, veins colored like membrane. Venter: Orange to red, abdomen red, genital segment more orange and clothed with long, pale setae. Legs: Pale testaceous; tibiae weakly spined; claws and tarsi testaceous. Genitalia: Left paramere three pronged; basal prong short, appressed along dorsal margin of middle prong, apex strongly recurved (Fig. 6); right paramere sickle-shaped with basal process notched apically (Fig. 7); theca (Fig. 8).

Female.—Length 3.48 mm, width 1.60 mm. Head: Length 0.68 mm, width 0.78 mm, vertex 0.36 mm. Rostrum: Length about 1.10 mm (imbedded in



Figs. 2–5. *Ceratocapsus spinosus.* 2. Left paramere, lateral view; 3. Left paramere, inside lateral view; 4. Right paramere; 5. Theca of aedeagus. Figs. 6–8. *Ceratocapsus aurantiacus.* 6. Left paramere, lateral view; 7. Right paramere, lateral view; 8. Theca of aedeagus.

glue), reaching middle of mesocoxae. Antennae: Testaceous; I, 0.32 mm, red dash on inside margin; II, 1.14 mm, apex tinged with orange; III, 0.64 mm, apical ½ tinged with orange; IV, 0.46 mm, reddish orange, pale at base. Pronotum: Length 0.70 mm, width at base 1.24 mm. The females are similar to the male in color and form except for minor variation noted in the antennae.

Holotype.—♂, Archbold Biological Station, Highlands Co., Fla., 5-3-1967, S. W. Frost collector (USNM Type #75435). Allotype: ♀, same data as holotype, 5-5-1967 (USNM). Paratypes: 2♀, same data as other types (PSU collection).

Remarks.—*Ceratocapsus aurantiacus* keys to *taxodii* Knight or *vicinus* Knight (Knight, 1941) and to *vicinus* Knight (Blatchley, 1926), but differs from both species in color and the structure of the male genitalia.

Ceratocapsus aurantiacus is characterized most easily by the orange to orange-red color and the structure of the male genitalia. The basal prong of the left paramere is reduced but strongly recurved apically; the basal process of the right paramere is rather broad and apically notched. The name *aurantiacus* is derived from the Latin adjective *aurantium*, meaning orange.

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Footnote

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